



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3406 FAX (603) 271-7894



Mr. Ted Sutton
Town Administrator
Town of Lincoln
Public Works Dept.
Lincoln, NH 03251-0025

October 7, 2002
Letter of Deficiency
DAM #137.04

RE: Loon Reservoir Dam, Lincoln

Dear Mr. Sutton:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on August 29, 2001 and August 23, 2002. During this visual inspection and/or file review, the following deficiencies were observed:

There is no operation and maintenance plan (O&M) on file with the DES; and

2. There is no Emergency Action Plan (EAP) on file.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

February 1, 2003:

1. Prepare and submit to the DES a written O&M plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel. Refer to the enclosed guidelines; and
2. Submit a draft EAP for review by this office. For assistance with the completion of this document please contact NHDES EAP Coordinator, Ms. Bethann McCarthy.

NHDES has determined that the hazard classification of this dam should be upgraded from a low hazard, Class A, dam to a significant hazard, Class B, dam. The reasoning behind this upgrade is summarized in the recent inspection report and is as follows:

"A failure of this dam would cause some major flooding of the access road to the Water Treatment Plant and may even sever the road. A breach flow of 1227 cfs was calculated for this dam. A concrete box culvert (3' high x 5' wide, invert= 6'), with a discharge capacity of 152 cfs, carries the flow from the impoundment. During a 50-year storm event it is predicted that this access road would be flooded by less than 1 foot of water. Further downstream private residences along Riverview Road have reported property damage as a result of storm flows in the past (April 2002). These residences would likely experience major property damage from a breach flow however the flood wave would be short lived due to the minimal storage capacity of the reservoir. The flow then enters the East Branch of the Pemigewasset River. Due to the potential for major economic damage to the WTP access road and to downstream residences, the upgrade in hazard classification from low hazard to significant hazard, Class "B", is justified for this structure."

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As a result of this change in hazard classification the annual dam registration fee will be \$300. A dam safety inspection will be conducted on a four-year rotation verses a six-year rotation.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

COPY
Grace E. Levergood
Grace E. Levergood, P.E.
Dam Safety Engineer

Attachments: Guideline for an O&M plan, DB13
cc: Bill Willey, Town of Lincoln, Public Works Dept.
Gretchen Rule

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